

WHAT IS CLAIMED IS:

1. A liquid crystal display device comprising a thin film transistor array substrate including: pixel use thin film transistors, which are formed on an insulating substrate and each of which has a gate electrode, a source electrode and a drain electrode; pixel electrodes, which are formed on the insulating substrate and comprised of a transparent conductive film connected to the respective pixel use thin film transistors; and a supplementary capacitance for retaining electric charges of the pixel electrodes, and a liquid crystal layer held between the thin film transistor array substrate and an opposite substrate, the supplementary capacitance being provided by the pixel electrodes, a supplementary capacitance use transparent insulating film formed under at least the pixel electrodes and a common electrode that is formed under the supplementary capacitance use transparent insulating film and comprised of a transparent conductive film connected to a specified potential, and the pixel electrodes, the supplementary capacitance use transparent insulating film and the common electrode having a film thickness such that the electrodes and film have a transmittance increased by interference at a specified wavelength.

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2. A liquid crystal display device as claimed in claim 1, wherein

a difference between a refractive index of the supplementary capacitance use transparent insulating film and a refractive index of the pixel electrodes is set to a value of not greater than 0.6 and a difference between a refractive index of the supplementary capacitance use transparent insulating film and a refractive index of the common electrode is set to a value of not greater than 0.6.

3. A liquid crystal display device as claimed in claim 1, wherein

the pixel electrode and the common electrode are made of a material having a specific resistance of $1 \text{ m}\Omega\cdot\text{cm}$ or less.

4. A liquid crystal display device as claimed in claim 1, wherein

the pixel electrodes have edge portions overlapping gate bus lines and source bus lines formed on the insulating substrate, and

the common electrode is arranged between the gate bus lines and the pixel electrodes and between the source bus lines and the pixel electrodes so as to cover the gate bus lines and the source bus lines.

5. A liquid crystal display device as claimed in claim 1, wherein

the supplementary capacitance use transparent insulating film is any one of a silicon oxide film, a silicon nitride film and an organic resin film or a laminate film comprised of at least two of the silicon oxide film, the silicon nitride film and the organic resin film.

6. A liquid crystal display device as claimed in claim 1, wherein

the pixel use thin film transistor has an active layer made of polysilicon, and

10 drive circuit use thin film transistors whose active layers are made of polysilicon are formed on the insulating substrate identical to the substrate on which the pixel use thin film transistors are formed.

7. A liquid crystal display device as claimed in claim 6, wherein

15 the active layers of the pixel use thin film transistors and the drive circuit use thin film transistors are polysilicon films crystallized by utilizing a catalytic effect of an introduced catalytic element.

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